

IN THE CLAIMS

1. (Currently Amended) Composite of polymer or ceramic material for the manufacture of components used in biological implants, the composite comprising

a) ~~materials~~ fibers that do not absorb substantial amounts of X-rays located in a polymer or ceramic material; and

b) X-ray absorbing reinforcing fibers ~~wherein individual fibers are distributed within the composite~~ throughout the fibers that do not absorb substantial amounts of X-rays in a defined manner to provide X-ray visibility control for the biological implant components ~~so that a majority of the fibers do not contact each other.~~

2. (Canceled)

3. (Previously presented) Composite according to claim 1, wherein the composite is prefabricated as a profiled rod material comprised of thermoplastics with carbon fibers and fibers made out of an X-ray absorbing material.

4. (Currently amended) Composite according to claim 1, wherein the composite comprises carbon fiber-reinforced PAEK (poly-aryl-ether ketone) and the X-ray absorbing fibers.

5. (Currently Amended) Composite according to claim 3, wherein the carbon fibers and the X-ray absorbing fibers are designed as continuous fibers and/or fibers with a length exceeding 3 mm.

6. (Currently Amended) Composite according to claim 1, wherein the ~~used~~ fibers (6) are enveloped by the [[a]] matrix material.

7. (Currently Amended) Composite according to claim 1, wherein the X-ray absorbing fibers comprise a ~~an X-ray absorbing~~ nonmagnetic material.

8. (Currently Amended) Composite according to claim 1, wherein the X-ray absorbing fibers are made from materials selected from the group comprising: tantalum, tungsten, gold, and platinum.

9. (Currently Amended) A component made from a composite of polymer or ceramic material having X-ray absorbing reinforcing fibers distributed within throughout the composite ~~so that a majority of the fibers do not contact each~~

~~other~~, wherein ~~[[the]]~~ an orientation of the X-ray absorbing reinforcing fibers ~~elements~~ is tailored to ~~[[the]]~~ a shape and application of the component (1, 18) in a defined manner to provide X-ray visibility control for the component.

10. (Previously presented) Component according to claim 9, wherein the fibers are oriented differently depending on the longitudinally or transverse oriented alignment of the component (1, 18).

11. (Currently Amended) Component according to claim 9, further comprising carbon fibers, wherein the ratio of carbon fibers to X-ray absorbing fibers ~~can be or~~ is variable at a total fiber percentage of approx. 50 %v/v.

12. (Currently Amended) Component according to claim 9, further comprising carbon fibers, wherein ~~[[the]]~~ a total fiber percentage in the composite remains constant over ~~[[their]]~~ a length or width of the component, ~~but this which~~ changes ~~[[the]]~~ a ratio of carbon fibers (6) to X-ray absorbing fibers (6) ~~or fibrous parts made out of an X-ray absorbing material.~~

13. (Previously presented) Component in the form of a connecting element according to claim 9, wherein the stiffness of the connecting element can be

varied by varying the orientation of fibers from a force application point toward a free end of the component.

14. (Cancelled)

15. (Currently Amended) Component in the form of a strip or plate assembly part according to claim 9, wherein a concentration of fibers (6) is present in ~~[[the]]~~ an area (A) of one or more recesses (14) or holes in the component (18), and wherein the percentage of the X-ray absorbing fibers is reduced in the area (A) ~~these areas~~.

16. – 18. Canceled.

19. (New) Component according to claim 9, wherein the composite comprises fibers that do not absorb substantial amounts of X-rays located in a polymer or ceramic material matrix material throughout which the X-ray absorbing fibers are distributed, a concentration of the X-ray absorbing fibers to the fibers that do not absorb X-rays being varied in different areas of the component.